



U.S. AIR FORCE



Benefits

- Protects human health and the environment
- Complies with air regulations
- Maintains mission capabilities
- Maximizes military value

Air Quality Management

Overview

The commitment of the U.S. Air Force Air Quality Program is to protect public health, our workforce, and the environment from harmful pollutants while sustaining the war fighter mission. This essential task not only involves reporting of air pollution from base sources but implementing innovative technologies to prevent or reduce emissions that impact the air we breath. The Air Quality Program guarantees careful management of base resources in a cost-effective manner while maintaining our Air Force mission.

Program Areas

Air Quality Management

Uses innovative processes and technologies to maintain air quality, which is vital to protecting the environment, the community, and access to airspace while allowing for future growth at Air Force bases.

General Conformity

Ensures that Air Force activities do not cause or contribute to the violation of air quality standards. The Clean Air Act requires the EPA to regulate the activities of all Federal Agencies to assure they meet State and Federal air pollution control standards. The Air Force also performs analyses of proposed actions in order to examine possible air quality impacts and to avoid interfering with efforts to improve air quality.

Permitting Activities

Enable bases to successfully obtain and maintain the proper air permits that assist and improve air quality planning, emission controls and compliance. Permits provide information on what pollutants are released, how much may have been released, and the steps being taken to prevent, reduce and monitor emissions.

Climate Change Efforts

Focus on the use of new technologies and processes, such as using cleaner burning fuels and installing energy efficient appliances in "green building" design, to conserve energy and efficiently utilize our resources and reduce greenhouse gases.

Major Initiatives

Emission Standards - The Air Force is working with the EPA on the development of a new rule for hazardous air pollutants released from paints, solvents, and other chemicals. Air Force efforts are focused on setting hazardous pollutant standards for certain military coatings and chemicals that would be affected by the new Rule, which account for 90% of regulated hazardous air pollutant emissions. The draft provisions, if accepted, would allow the use of military documents, as governing documents, thereby reducing recordkeeping and compliance burden in the field. This would also eliminate the need to make large and costly changes to numerous Air Force maintenance manuals.

Installation Training - The Atlanta Regional Environmental Office, Georgia, is developing a training program to familiarize bases and state agencies with emission requirements established in State Implementation Plans (SIPs). A base-specific budget line item supports mission growth and can help prevent Federal General Conformity regulations from potentially halting future mission growth-related projects. Once completed, the training will be available through the Air Force's Web University.

Test Method Development - Through an Environmental Security Technology Certification Program project, Hill AFB, Utah, and the EPA have been developing a test method that utilizes digital photography and software, called Digital Opacity Compliance System (DOCS), to measure opacity, or cloudiness that designates levels of pollution, from stationary source emission stacks. This new test method, PRE 008, provides an "opacity" percentage and is a visual record of the test for compliance purposes. PRE 008 is designed to be an alternate to the current method, which uses human observers to determine opacity. The DOCS software will be delivered to DoD sources through the Air Program Information Management System.

Successes

Alternative Fuels

In 2005, the Air Force exceeded the Energy Policy Act's 75% requirement for purchasing Alternative Fueled Vehicle (AFVs), and in accordance with Executive Order 13149, successfully increased the average fuel economy rating by 3 miles per gallon (mpg) for light duty non-AFVs. The 2005 fleet average fuel economy for covered, conventional petroleum light duty non-AFVs is **21.9 mpg** compared to the FY99 baseline of 17 mpg. Air Force success is due to the Major Commands and local commanders placing special emphasis on obtaining AFVs and the use of biodiesel and other alternative fuels where practical.



Paint Substitution

A powder coating technology is now being substituted for conventional solvent paint in the Sheet Metal Shop at Tinker AFB, Oklahoma. This process produces a superior durable coating at a lower cost than conventional painting, and reduces emissions of volatile organic compounds and hazardous air pollutants.

California Diesel Regulation for Emergency Generators

The DoD Regional Environmental Coordinator 9 team, with initial input from Vandenberg AFB, California, engaged the California Air Resources Board regarding diesel regulation. Through successful negotiations, the DoD team was able to obtain exemptions for satellite tracking backup generators and extended testing hours for hospital generators. The estimated savings to the DoD is **\$1.5 million**.

